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Family list
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1 **1,4-disubstituted piperidine derivatives**
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2 **1,4-DISUBSTITUTED PIPERIDINE DERIVATIVES**
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English Abstract

B14

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添付公開書類
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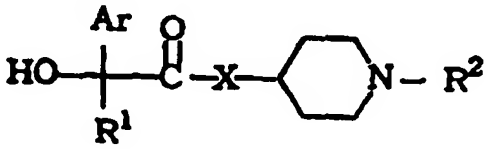
(54)Title: 1,4-DISUBSTITUTED PIPERIDINE DERIVATIVES

(54)発明の名称 1,4 ジ置換ピペリジン誘導体

(57) Abstract

1,4-Disubstituted piperidine derivatives represented by general formula (I) and pharmaceutically acceptable salts thereof, wherein Ar represents heteroaryl having one or two heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur and optionally fused to aryl or benzene (wherein each hydrogen on the aryl and heteroaryl rings may be substituted by lower alkyl, halogeno, lower alkoxy, amino or hydroxymethyl); R^1 represents C_{3-6} cycloalkyl having one or two hydroxyl groups on the ring; R^2 represents heteroarylalkyl having one or two heteroatoms selected from the group consisting of nitrogen, oxygen and sulfur and optionally fused to saturated or unsaturated aliphatic C_{5-15} hydrocarbon, aralkyl, arylalkenyl or benzene (wherein each hydrogen on the aralkyl, arylalkenyl and heteroarylalkyl rings may be substituted by lower alkyl, halogeno, lower alkoxy, amino or hydroxymethyl); and X represents O or NH. Because of having a selective muscarine M_3 receptor antagonism, these compounds are useful as safe remedies or preventives with little side effects for respiratory diseases such as asthma, chronic respiratory obstruction and pulmonary fibrosis; urologic diseases in association with urination disorders such as frequent urination, urgency of micturition and urinary incontinence; and digestive diseases such as irritable bowel syndrome and convulsion or motor hyperenergia of digestive tracts.



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